

Shocking Video Simulation Shows the Devastation Nuclear War Would Cause

By [Joshua Coupe](#), [Charles G. Bardeen](#), [Alan Robock](#), [Owen B. Toon](#), [Adam Brookes](#), and [Dagny Taggart](#)
Global Research, December 06, 2024
[The Organic Prepper](#) 17 September 2019

Region: [Russia and FSU, USA](#)
Theme: [Militarization and WMD](#)
In-depth Report: [Nuclear War](#)

[This article was first posted on GR in September 2019.]

The United States and Russia have quite the bumpy relationship. Talk of war between the two powerful countries isn't anything new, and anyone who is paying attention knows that such a war would be devastating for much of the world.

Two recent research projects show just how bad things would be if the US and Russia unleashed their nuclear arsenals on each other.

A war between the US and Russia would cause a global nuclear winter.

Several months ago, researchers from Rutgers University, the University of Colorado Boulder, and the National Center for Atmospheric Research ran a simulation to see what a nuclear war between the US and Russia would do, and the findings were not pretty: Such a war would plunge the planet into a [nuclear winter](#), with clouds of soot and smoke covering the planet. The study, published in the [Journal of Geophysical Research: Atmospheres](#), found that the nuclear detonations would inject about 147 million tons of soot into the atmosphere. That soot would then spread around the stratosphere, blanketing the Earth in darkness:

Current nuclear arsenals used in a war between the United States and Russia could inject 150 Tg of soot from fires ignited by nuclear explosions into the upper troposphere and lower stratosphere. We simulate the climate response using the Community Earth System Model-Whole Atmosphere Community Climate Model version 4 (WACCM4), run at 2° horizontal resolution with 66 layers from the surface to 140 km, with full stratospheric chemistry and with aerosols from the Community Aerosol and Radiation Model for Atmospheres allowing for particle growth.

We compare the results to an older simulation conducted in 2007 with the Goddard Institute for Space Studies ModelE run at 4° × 5° horizontal resolution with 23 levels up to 80 km and constant specified aerosol properties and ozone. These are the only two comprehensive climate model simulations of this scenario. Despite having different features and capabilities, both models produce similar results. Nuclear winter, with below freezing temperatures over much of the Northern Hemisphere during summer, occurs because of a reduction of surface solar radiation due to smoke lofted into the stratosphere. WACCM4's more sophisticated aerosol representation removes smoke more quickly, but the magnitude of the climate response is not reduced. In fact, the

higher-resolution WACCM4 simulates larger temperature and precipitation reductions than ModelE in the first few years following a 150-Tg soot injection. A strengthening of the northern polar vortex occurs during winter in both simulations in the first year, contributing to above normal, but still below freezing, temperatures in the Arctic and northern Eurasia.

Read full article from Wiley Online Library [here](#).

Not only would explosions, fires, and radiation exposure kill millions in targeted cities, but the resulting nuclear winter – which could last many years- would drastically alter the Earth’s climate. The growing season would be slashed by nearly 90 percent in some areas, and death by famine would threaten nearly all of the Earth’s 7.7 billion people.

According to the model, the soot would not visibly clear for around seven years. Temperatures would drop by an average of 9 degrees Celsius (16 degrees Fahrenheit) across the globe, [the researchers wrote](#), and it would take around three years for surface light to return to 40 percent of its pre-attack level.

More than 90 million immediate casualties would result.

Researchers at Princeton University created a simulation to see just how bad a nuclear war between the US and Russia would be for humanity, and the picture they paint is terrifying. The team used the [Pentagon’s own plans](#) (which were recently leaked) to “highlight the potentially catastrophic consequences of current US and Russian nuclear war plans,”

The Pentagon Revealed Its Nuclear War Strategy and It's Terrifying

'The United States has always sought to use its nuclear weapons for more than deterrence despite protestations to the contrary.'

By **Matthew Gault**

Jun 21 2019, 12:27pm  Share  Tweet



GEORGE C. SCOTT PLAYS THE ROLE OF GENERAL BUCK TURGIDSON IN THE 1964 FILM DR. STRANGELOVE OR: HOW I LEARNED TO STOP WORRYING AND LOVE THE BOMB. IMAGE: JOHN SPRINGER COLLECTION/CORBIS/CORBIS VIA GETTY IMAGES

The Pentagon published the “Doctrine for Joint Nuclear Operations” on the Joint Chiefs of Staff’s website last week, then pulled the document. The 60 page paper is a look at how the Pentagon views nuclear weapons, the circumstances under which it might use them, and how it might fight after a nuclear detonation.

The “Doctrine for Joint Nuclear Operations” vanished from the Joint Chiefs website, but not before the Federation of American Scientists (FAS)—a non-profit that uses science to study national and international security threats—[archived it](#).

Nuclear war policy is terrifying. These weapons have the power to destroy all life on Earth, but the Pentagon has thought long and hard about how to deploy these weapons in smaller engagements. The leaked document is just further proof of that.

[Screenshot at Vice.com](#)

A [press release states](#).

The risk of nuclear war has increased dramatically in the past two years as the United States and Russia have abandoned long-standing nuclear arms control treaties, started to develop new kinds of nuclear weapons and expanded the circumstances in which they might use nuclear weapons. ([source](#))

Researchers at Princeton’s Science and Global Security Lab created this video, which shows

just how widespread the devastation from a nuclear war would be.

Does that simulation remind anyone else of the 1983 movie [War Games](#)? In that film, a young hacker accidentally accesses a US military supercomputer system called War Operation Plan Response (WOPR). Believing it is a video game, the hacker gets WOPR to run a nuclear war simulation – and the computer nearly starts World War III.

At the end of the movie, the computer tells Professor Falken, who is attempting to stop the WOPR from launching war, that nuclear war is “a strange game” in which “the only winning move is not to play.”

How Many Nuclear Weapons Are There?

Nine countries together possess nearly [14,000 nuclear weapons](#). The US and Russia have the most (6185 and 6500, respectively).

According to [ICAN](#), “The United States and Russia maintain roughly 1,800 of their nuclear weapons on high-alert status – ready to be launched within minutes of a warning. Most are many times more powerful than the atomic bombs dropped on Japan in 1945.”

If all of the nuclear weapons in the world were detonated at once, what would happen? The YouTube channel [Kurzgesagt - In a Nutshell](#) attempts to demonstrate the aftermath in this video.

Is Nuclear War Between the US and Russia Inevitable?

Such a war would be suicide for both countries, so why either would resort to such a thing baffles the mind. Earlier today, [CNBC reported](#) that Russia is conducting massive military drills with China, India, and Pakistan, in what experts say could be Moscow “sending a powerful message to the West.” Some [sources](#) report that tensions between the US and Russia are escalating to “new Cold War” levels. Others believe that the ousting of war hawk John Bolton might be a sign of the potential for a [Russia-China-US alliance](#).

*

Click the share button below to email/forward this article to your friends and colleagues. Follow us on [Instagram](#) and [Twitter](#) and subscribe to our [Telegram Channel](#). Feel free to repost and share widely Global Research articles.

[Global Research's Holiday Fundraiser](#)

***Dagny Taggart** is the pseudonym of an experienced journalist who needs to maintain anonymity to keep her job in the public eye. Dagny is non-partisan and aims to expose the half-truths, misrepresentations, and blatant lies of the MSM.*

The original source of this article is [The Organic Prepper](#)

Copyright © [Joshua Coupe](#), [Charles G. Bardeen](#), [Alan Robock](#), [Owen B. Toon](#), [Adam Brookes](#), and [Dagny Taggart](#), [The Organic Prepper](#), 2024

[Comment on Global Research Articles on our Facebook page](#)

[Become a Member of Global Research](#)

Articles by: [Joshua Coupe](#),
[Charles G. Bardeen](#),
[Alan Robock](#), [Owen B.](#)
[Toon](#), [Adam Brookes](#),
and [Dagny Taggart](#)

Disclaimer: The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: publications@globalresearch.ca
www.globalresearch.ca contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca